AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows:

1. (Original) A noise filter comprising:

a ground line for discharging a short-circuit current generated on an electronic apparatus to ground;

an inductor which suppresses a noise current, induced on the ground line, flowing from the ground line into the electronic apparatus; and

a resistor connected in parallel with the inductor; wherein

assuming a lower limit angular frequency of the noise current to be ωn[rad], inductance of the inductor to be L[H], resistance of the resistor to be R[Ω], and earth capacitance of the electronic apparatus is C[F], a relationship of $\sqrt{(L/C)} < R < 2\,\omega n^2 L$ (provided $C > 1/(4\,\omega n^4 L)$) is established.

2. (Original) A noise filter comprising:

a ground line for discharging a short-circuit current generated on an electronic apparatus to ground;

an inductor which suppresses a noise current, induced on the ground line, flowing from the ground line into the electronic apparatus; and

a resistor connected in parallel with the inductor; wherein
the inductor has a magnetic saturation characteristic, by which the inductor acts as a circuit element magnetically saturated by the short-circuit current and discharges the short-circuit current from the electronic apparatus to the ground line.

3. (Original) The noise filter as claimed in claim 2, wherein the resistor suppresses a resonant frequency current caused by series resonance of, earth capacitance between the electronic apparatus and ground, and the inductor, and dissipates electric power charged in the inductor.

4. (Original) The noise filter as claimed in claim 2, wherein assuming a lower limit angular frequency of the noise current to be ωn[rad], inductance of the inductor to be L[H], resistance of the resistor to be R[Ω], and earth capacitance of the electronic apparatus is C[F], a relationship of $\sqrt{(L/C)} < R < 2\,\omega n^2 L$ (provided $C > 1/(4\omega n^4 L)$) is established.

5. (Original) The noise filter as claimed in claim 2, wherein assuming an angular frequency of a power supply current to be ωp[rad], a lower limit angular frequency of the noise current to be ωn[rad], inductance of the inductor to be L[H], and resistance of the resistor to be R[Ω], a relationship of $10(\omega p \cdot L) < R < (\omega n \cdot L)/10$ is established.

6. (Original) The noise filter as claimed in claim 2, wherein assuming an angular frequency of a power supply current to be ωp[rad], a lower limit angular frequency of the noise current to be ωn[rad], inductance of the inductor to be L[H], and resistance of the resistor to be R[Ω], a relationship of $100(\omega p \cdot L) < R < (\omega n \cdot L)/100$ is established.

7. (Original) The noise filter as claimed in claim 2, wherein assuming an angular frequency of a power supply current to be ωp[rad], a lower limit angular frequency of the noise current to be ωn[rad], inductance of the inductor to be L[H], and resistance of the resistor to be R[Ω], a relationship of $1000(\omega p \cdot L) < R < (\omega n \cdot L)/1000$ is established.

8. (Currently Amended) The noise filter as claimed in claim 2, wherein a parallel circuit ~~consisting of~~ including the inductor and the resistor is so formed that one terminal is grounded through the ground line and another terminal connects to the electronic apparatus.

9. (Original) The noise filter as claimed in claim 2, wherein when the short-circuit current is 25[A], impedance of the noise filter is 0.1[Ω] or less.

10. (Original) The noise filter as claimed in claim 2, wherein when a frequency of the noise current is 10[kHz], reactance of the inductor is 2[kΩ] or more.

11. (Currently Amended) The noise filter as claimed in claim 2, wherein the resistor ~~is~~ comprises a variable resistor.

12. (Currently Amended) The noise filter as claimed in claim 11, wherein the inductor ~~is~~ comprises a toroidal coil, a parallel circuit ~~consisting~~ including of the toroidal coil and the variable resistor is housed in a frame, the variable resistor is arranged in a space surrounded by an inner peripheral wall of the toroidal coil, and resistance varying means for varying resistance of the variable resistor is provided at such a position as to be able to be operated from an outside of the frame.

13. (Currently Amended) An electronic apparatus comprising the noise filter as claimed in ~~any one of claims 1 to 12~~ claim 1.

14. (New) An electronic apparatus comprising the noise filter as claimed in claim 2.

15. (New) An electronic apparatus comprising the noise filter as claimed in claim 3.

16. (New) An electronic apparatus comprising the noise filter as claimed in claim 4.

17. (New) An electronic apparatus comprising the noise filter as claimed in claim 5.

18. (New) An electronic apparatus comprising the noise filter as claimed in claim 6.

19. (New) An electronic apparatus comprising the noise filter as claimed in claim 7.

20. (New) An electronic apparatus comprising the noise filter as claimed in claim 8.